

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A composition for inhibiting stain formation in a floor covering, comprising:

a copper glycine complex;  
magnesium hydroxide; and  
a carrier.

2. The composition of Claim 1, wherein the copper glycine complex is present in an amount from about 5 to about 20 percent by weight based on the total weight of the composition.

3. The composition of Claim 1, wherein magnesium hydroxide is present in an amount from about 1 to about 15 percent by weight based on the total weight of the composition.

4. The composition of Claim 1, wherein the copper glycine complex has a copper to glycine molar ratio in the range of from about 1:1 to about 1:4

5. The composition of Claim 1, wherein the carrier is substantially insoluble in polyvinylchloride-based plastisols.

6. The composition of Claim 1, wherein the carrier comprises an aromatic polyether-based polyol.

7. The composition of Claim 1, wherein the carrier is present in an amount from about 20 to 80 percent by weight of the total composition.

8. The composition of Claim 1 further comprising an additive, wherein the additive is at least one of an opacifying agent, a viscosifying agent, a diluent, a polymer, a surfactant, a dispersant, a filler, a preservative, or a colored pigment.

9. The composition of Claim 8, wherein the opacifying agent comprises titanium dioxide.

10. The composition of Claim 8, wherein the viscosifying agent is at least one of fumed silica or an associative thickener.

11. The composition of Claim 8, wherein the surfactant comprises a nonionic surfactant.

12. The composition of Claim 8, wherein the polymer comprises is a carboxylated styrene-butadiene latex.

13. The composition of Claim 1, wherein the composition includes dispersed particles up to about 5 um in size.

14. A method for inhibiting stain composition in a floor covering overlaying a wood-based substrate, comprising:

a) applying a stain inhibiting composition to a surface of a wood-based substrate to provide a coated wood-based substrate, wherein the composition comprises a copper glycine complex, magnesium hydroxide, and a carrier; and

b) overlaying a floor covering onto the coated wood-based substrate.

15. The method of Claim 14, wherein the floor covering comprises a vinyl floor covering.

16. The method of Claim 14, wherein the wood-based substrate comprises oriented strandboard.

17. The method of Claim 14, wherein the composition is applied by spraying.

18. The method of Claim 14, wherein the composition is applied by roll coating.

19. The method of Claim 14, wherein the floor covering is overlaid onto the wood-based substrate immediately after coating the stain inhibiting composition onto the substrate.

20. A flooring assembly resistant to stain formation, comprising:  
a floor covering; and

a wood-based substrate having a surface coated with a composition for inhibiting stain formation in the floor covering, the composition intermediate the wood based substrate and the floor covering, wherein the composition comprises:

- a copper glycine complex;
- magnesium hydroxide; and
- a carrier.

21. The flooring assembly of Claim 20, wherein the wood-based substrate comprises oriented strandboard.

22. The flooring assembly of Claim 20, wherein the floor covering is a vinyl floor covering.

23. The flooring assembly of Claim 20, wherein the flooring assembly is installed in a manufactured home.